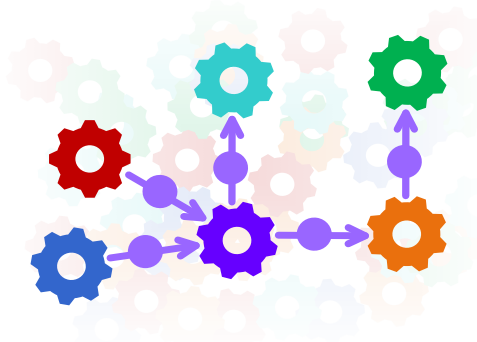


Grid Model Data Management (GMDM) Vendor Forum

An EPRI-Sponsored Vendor-Funded Collaborative Initiative



Background, Objectives, and New Learnings

EPRI's Distribution GIS & Grid Model Data Management (GMDM) project is defining functional capabilities for managing network models. To support future success of this effort, EPRI wants to engage vendors of distribution domain software products that supply, manage or consume grid model data in the conversation.

The GMDM Vendor Forum will:

- Improve the GMDM data management architecture via vendor review and feedback
- Demonstrate multi-vendor interoperability using the GMDM architecture
- Improve CIM support for distribution network model data exchange
- Provide industry-supported, interoperability-tested interface specifications to support product development and procurement

Benefits

Participants will gain benefit from:

- Understanding and influencing the CIM-based GMDM architecture
- Being part of focused, facilitated development of CIM standard data exchange definitions
- Being part of a future where development effort focuses on tool capabilities, not specialized, limited-use interfaces

Society at large will benefit as utilities cost-effectively build the data management foundations required to support the advanced grid simulations and analytics necessary to optimize the evolving distribution network.

- Understand and influence the CIM-based grid model data management architecture being developed by the EPRI Grid Model Data Management project
- Demonstrate product interoperability to the industry and to potential customers
- Minimize effort and cost in product deployments

Summary of Proposed Activities

Four main work steps are envisioned:

1. Refinement of the GMDM data management architecture based on participant review and feedback
2. Identification of key data exchanges, aligned with the GMDM architecture, to be tested in the Interoperability Event
3. Refinement, within the IEC CIM Working Group framework, of the CIM data model and profiles supporting the key data exchanges
4. Demonstration of the feasibility and value of the GMDM architecture at an Interoperability Event where multiple vendor products successfully interoperate using the key data exchanges

Interoperability Event

The Interoperability Event builds on a series of EPRI-facilitated activities aimed at developing clarity and understanding around the data exchanges to be tested. The purpose of the Interoperability Event is to demonstrate cross-product data exchange facilitated by the refined CIM model and profiles, not to 'certify' vendor products. It will be preceded by a face-to-face, vendor-only workshop, which will 'dry run' the interoperability tests and allow issues to be identified and potential solutions explored.

Participation in the pre-Event workshop and the Interoperability Event will be limited to vendors who are members of the GMDM Vendor Forum. Test witnesses will be drawn from the GMDM funding utilities as well as from

other interested utilities and integration services companies. Artifacts to support testing, including appropriate test models tailored to the key data exchanges, test procedures and validation tools will be provided. A certificate of participation will be issued to each vendor, listing its tools and the data exchanges in which they participated.

Deliverables

The following deliverables are currently planned:

- Documentation of the GMDM Architecture
- Identification of key data exchanges to be tested in the Interoperability Event
- UML modeling refinements developed by the project (contributed by EPRI to the UCA International User Group for inclusion into the CIM information model)
- Test models
- Test procedures
- Interoperability Event Report

To support broad adoption of the GMDM Architecture, it is anticipated that the above deliverables will be made publicly available for free.

Price of Project

GMDM Vendor Forum project has a sliding scale cost for participation based on participant market size. The metric for determining market size is the count of total staff supporting products which are used in the distribution domain and which produce, consume or manage grid model data.

Vendor Forum Participant Size	Cost to participate	Total product staff ^[a]
jumbo vendor	\$80,000	more than 250
large vendor	\$60,000	150 to 249
medium vendor	\$40,000	70 to 149
small vendor	\$20,000	20 to 69
micro vendor	\$8,000	fewer than 20

[a] Support staff includes all staff engaged in activities related to the product(s), including product engineering/development, product maintenance, installation, training, support, sales/marketing, administration/management support, etc.

Interested participants will be asked to provide a list of all their products which are used in the distribution domain by electric utilities and which produce, consume or manage

grid model data, along with the count of total staff supporting those products.

Project Schedule

The GMDM Vendor Forum project will start when 8 vendors have joined and will run for approximately 19 months:

Task	Q1	Q2	Q3	Q4	Q5	Q6
1 GMDM Architecture Review	■	■	■			
2 ID of Key Data Exchanges		■	■			
3 CIM Model Refinement		■	■	■	■	
4 Interop Demonstration						
a) test model creation			■	■	■	
b) test procedure creation				■	■	
c) Pre-Event Workshop						■
d) Interoperability Event						■
e) Final Report published						■

Funder Expectations

Participants are expected to:

- Provide feedback on the GMDM architecture
- Engage in IEC TC57 CIM WG13 model and profile development activities facilitated by the project
- Develop key data exchange interfaces on one or more products and participate in the pre-Event workshop and Interoperability Event

Who Should Join

Vendors whose products are used by electric distribution utilities and which produce, consume or manage network model data are candidates for joining the GMDM Vendor Forum project. The project is of particular value to vendors interested in promoting interoperability and benefitting from streamlined product deployment.

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